

In re Application of: Moshe EINAT et al.
Serial Application No.: 10/566,481
Filed: January 31, 2006
Final Office Action Mailing Date: November 16, 2007

Examiner: Lisa SOLOMON
Group Art Unit: 2861
Attorney Docket: 31267

REMARKS

Claims 1-79 are pending in the Application. Claims 1-37, 44-46, 48-58 and 60-79 are withdrawn from consideration. Claims 38, and 59 are currently amended. Claim 39 is cancelled.

Claim Rejections – 35 U.S.C. §103

The Examiner rejected claims 38-39, 42, and 59, under U.S.C. §103(a) as being unpatentable over Hsu et al. (US Patent No. 6,652,068) in view of Baker et al. (US Patent No. 5,052,271).

In order to overcome the rejection, claim 39 has been incorporated into claim 38 and the term "ink-detaining" has been inserted to qualify the reservoir.

The Examiner, in rejecting claim 39, points to ink feed pipe 132 of Hsu as constituting a reservoir associated with each individual nozzle.

Feed pipe 132 is a smooth cylinder and therefore lacks any ink retaining features, so that ink flows smoothly to the nozzle. By contrast the present embodiments teach an ink retaining reservoir where capillary action is required to feed ink that would otherwise be retained in the reservoir. This difference relates to the geometry of the print head and leads to the present case being an ink retaining reservoir and that of the prior art merely being an ink feeding tube.

The same feature of ink-retaining has been inserted into independent claim 59, which is believed to be allowable for the same reason.

The feature not shown in Hsu, namely of an ink retaining reservoir being provided for each nozzle, is likewise not shown in Baker, which merely has a sponge for soaking up the ink.

Therefore, the combination of Baker and Hsu also does not teach an ink retaining reservoir per nozzle which retains ink and feeds the ink to the nozzle using capillary action. This is because while Hsu teaches feeding the ink via feed pipe 132 to each nozzle and Baker teaches using capillary action to feed each nozzle, neither of them teaches an ink retaining reservoir connected to each nozzle, and neither do they teach feeding each nozzle via capillary action *from* an ink-retaining reservoir.

The above feature is advantageous since the use of capillary action for the first time allows feeding of the ink at atmospheric pressure. Hsu would require a pump in

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order to work. Baker's specification does not address the issue of atmospheric pressure, but use of a sponge is generally problematic as it is impossible to clean if the ink dries. There is thus no solution known or hinted at in the prior art that allows feeding at atmospheric pressure without introducing the disadvantages of a sponge.

The remaining claims mentioned in the Office Action are believed to be allowable as being dependent on an allowable main claim.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome.

In view of the foregoing, it is respectfully submitted that all the claims now pending in the application are allowable.

An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,



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Date: March 12, 2008

Enclosures:

- Request for Continued Examination (RCE); and
- Petition for Extension of Time (1 Month)